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Ms. Sy Paulik, EQA Michigan Department of Environmental Quality 120 West Chapin Street Cadillac, Michigan 49601 March 6, 2006

RE: Site Update Report – Pond Release Investigation

Cherry Blossom LLC ISE Project No. 02061-59E

Dear Ms. Paulik:

This letter report provides an update for site activities completed by Inland Seas Engineering, Inc. (ISE) at the Cherry Blossom, LLC. parcel located at 10190 Munro Road, Whitewater Township, Grand Traverse County, Michigan. The purpose of this communication is to apprise the Michigan Department of Environmental Quality (MDEQ) of the response activities completed to date since our last update report dated December 12, 2005.

Brief Site History

On November 8, 2005, a release of impounded wastewater occurred from a Cherry Blossom storage pond. The release reportedly occurred as a result of a failure of the west wall of an earthen berm which served to impound the wastewater following a two (2) day storm event which brought approximately 1.85 inches of rain to the area (per Cherry Capital Airport). ISE conducted an initial assessment of the areas affected as a result of the release on November 22 and 23, 2005.

Four (4) geographic areas of potential environmental concern were identified as a result of ISE's initial assessment and are depicted on Figure 1. These areas have been referred to as:

Area A – Proximal on-site accumulation area. This area is lower in elevation than the storage pond and is located immediately west of the pond impoundment wall that failed. Wastewater pooled in low areas immediately proximal to the failure zone as it made it's way to a storm water detention basin located to the southwest (Area B).

- Area B Distal on-site accumulation area. Area B includes storm water detention basins. One of the basins serves as a conduit for released pond water to enter a roadside ditch (via a discharge pipe) located along the east side of Munro Road (Area C).
- Area C Munro Road ditch right-of-way. A roadside ditch with a gradient to the south served as a channel for wastewater to flow to a low-lying area located southwest of the intersection of Munro and Angell Roads (Area D). Pond water entered this area via a culvert that carries storm water beneath the intersection.
- Area D Off-site accumulation area. Area D is a low-lying area located southwest of the intersection of Munro and Angell Roads and is the endpoint of the released pond water. Area D is located on a parcel owned by Mr. Calvin Nagy.

The flow path for the released wastewater is shown on Figure 2.

Previous Site Investigation (Pond Release Investigation)

To determine potential impact of the release throughout the potential areas of concern, chlorides were selected as a screening parameter as it is non-reactive and present in measurable concentrations in pond water.

The four (4) areas of concern (Areas A-D) were evaluated for chloride concentration within surface soils, pooled release areas, and, where appropriate, within the shallow groundwater table. Initial investigative results indicate the following:

- Chloride concentrations in near surface soil samples collected from Area A exceed direct contact criteria. Deeper soil samples (4'-5' bgl) collected from this area did not indicate the presence of chlorides at concentrations above its direct contact criteria.
- Chloride concentrations in water samples collected from the detention basins located in Area B were found to contain significantly lower concentrations of chlorides than identified in pond storage water. Due to the presence of storm water that had accumulated in low-lying areas of Area B where pond water had previously accumulated, no soil samples could be collected to assess soil conditions.
- Chloride concentrations were identified in a soil sample collected along the roadside ditch (Area C) and in soil samples collected from Area D at concentrations above its direct contact criteria.

Based on the initial findings, ISE completed several additional investigation activities and response measures both on and off site. It should be noted that although much work has been completed in Areas A-D, Cherry Blossom has also been focusing on the removal and proper disposal of wastewater from the on-site storage pond.

Ms. Sy Paulik March 6, 2006 Page 3 of 6

Additional Investigation/Response Measures

The additional investigation and response measures recently completed at this site have been segregated by Area.

Area A Investigative and Response Measures

Due to the close proximity and lower elevation of this area relative to the storage pond, no response measures (i.e. use of heavy equipment) that could jeopardize the integrity of the pond impoundment area have been completed. In order to prevent the exacerbation of the existing contamination in portions of Area A where pond water had accumulated, a 20-mil PVC cover was placed over these sections to prevent storm water from infiltrating site soils. Area A will be further evaluated following the removal of additional wastewater from the pond.

Area B Investigative and Response Measures

The discharge pipe leading from the northern most storm water catch basin in Area B to the ditch located along the east side of Munro Road was plugged by Cherry Blossom and sealed with bentonite by ISE personnel in December 2005. This pipe was previously utilized for the transport of storm water from an on-site retention basin to the ditch during significant storm events. No other work has been completed in Area B.

Area C Investigative and Response Measures

Area C comprises the portion of the roadside ditch located in the Grand Traverse County Road right-of-way (R.O.W.) along the east side of Munro Road (between the discharge pipe from Area B and the intersection of Munro and Angell Roads. Initial investigative activities completed in this Area included the collection of a soil sample from three (3) feet below ground level (bgl) at location SB-130. The analytical laboratory results indicated the presence of chlorides in this sample at a concentration of 584 mg/Kg, which is above its direct contact value of 500 mg/Kg. ISE also completed several hand auger borings during this investigation to determine the depth of groundwater in Area C. Groundwater was not encountered in any of the borings to the maximum depth augered of 13 feet bgl.

Prior to completing additional work in Area C, ISE's survey department established control for future measurement purposes by placing a series of stakes along the roadside ditch. In addition, a R.O.W. permit was obtained from the Grand Traverse County Road Commission prior to completing the site work.

ISE completed seven (7) soil borings (SB-303 – SB-309), installed two (2) shallow monitor wells (MW-4s and MW-5s) and collected one groundwater grab sample (SB-305) using direct push methods in January 2006. Figure 2 depicts the soil boring/well locations and boring logs are contained in Attachment A. Soil samples were collected from each boring location at multiple depths and submitted to SPL for analysis of chlorides. The analytical laboratory results did not indicate the presence of chlorides in any of the soil samples submitted for laboratory analysis at concentrations above its respective direct contact value. Table 1 summarizes the analytical laboratory results.

Ms. Sy Paulik March 6, 2006 Page 4 of 6

In order to verify the previous soil sample result (584 mg/Kg) of the sample collected at three (3) feet bgl at SB-130, ISE completed SB-306 at this location. Soil samples collected from 0-1' bgl, 2'-3' bgl and 6'-7' bgl did not indicate the presence of chlorides at concentrations above their respective direct contact values. Based on this information, the sample result for the single soil sample previously collected from SB-130 does not appear representative of actual site conditions (see Table 1).

Groundwater samples collected from MW-4s and MW-5s did not indicate the presence of chlorides in the groundwater sample collected at concentrations above its respective direct contact criteria. The groundwater grab sample from SB-305 was collected at a depth of 14'-16' bgl and indicated the presence of chlorides at a concentration of 303 mg/L, which is slightly above its direct contact criteria of 250 mg/L. Based on this sample result, ISE will install a permanent monitor well at this location to further evaluate these conditions. Groundwater sampling results for Areas C and D are contained in Table 2.

Area D Investigative and Response Measures

Initial investigative activities completed in Area D included the collection of 16 soil samples at depths ranging from 12" to 18" bgl. The soil sample results indicated the presence of chlorides at concentrations ranging from 30 mg/Kg (SB-102) to 2,140 mg/Kg (TMW-1). Groundwater samples collected from temporary monitor wells set at a depth of approximately two (2) feet bgl indicated the presence of chlorides at concentrations below their respective residential Drinking Water Criterion. Table 2 summarizes the analytical laboratory results.

Based on ISE's initial findings, it appears the pond water was distributed across Area D along a two-track that extended from the northern portion of Area D (near the discharge pipe adjacent to Angell Road) southward to a point approximately 250 feet south of the road where an increase in surface elevation was evident. It should be noted that Area D is bounded to the west by a railroad grade and to the east by a parking lot, both of which have a higher elevation than the two-track in which the pond water is believed to have followed.

Based on the above information, ISE established a sampling grid in accordance with the MDEQ Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria in order to help delineate the extent of soil impaction and aid in the collection of pre-excavation soil verification samples for excavation purposes. Figure 3 depicts the layout of the grid and sample collection points. ISE used a 20 foot grid interval in establishing the grid. ISE's survey team laid out the sampling grid with stakes and several additional control points along the railroad grade and parking lot for future measurement needs. The survey team also surveyed in soil sampling locations and used this data to assemble a topographic map of Area D. Soil sample locations are shown on Figure 3.

ISE collected a total of 45 soil samples from representative cells at a depth of 18-inches bgl on December 15, 2005. The soil samples were submitted to SPL, Inc. of Traverse City, Michigan for chlorides analysis. The analytical laboratory results did not indicate the presence of chlorides in any of the soil samples submitted for laboratory analysis at a level above its respective direct contact criteria of 500 ppm. Table 3 summarizes the analytical laboratory results.

Ms. Sy Paulik March 6, 2006 Page 5 of 6

Based on the analytical laboratory results, depth to groundwater (approximately 20"-24" bgl) and the previous groundwater sample results, ISE personnel excavated approximately 425 cubic yards of impacted soil from Area D in December 2005. The excavation was completed to a minimum depth of at least 18-inches bgl, the depth at which the pre-excavation soil samples were collected. The excavated soils have been staged on-site on a 20-mil PVC liner and covered with same. The excavation was backfilled with clean sand fill and topsoil in accordance with the wetlands permit issued by the MDEQ. The fill material was excavated from a nearby parcel owned by Cherry Blossom since these soils contained like characteristics of the material removed from the wetland. Six (6) soil samples were collected from the fill material prior to being excavated to ensure elevated chloride concentrations were not present. The sample results did not indicate the presence of chlorides in the sample collected at elevated concentrations and are summarized in Table 3. This area will be seeded during spring 2006 with an appropriate vegetative cover. ISE is currently working with Cherry Blossom regarding disposal options for the excavated soil.

Prior to excavation activities, ISE, on behalf of Mr. Cal Nagy (owner of the parcel in which Area D is located), obtained appropriate permits from the MDEQ (wetland permit) and the Grand Traverse County Drain Commissioner's Office (Soil Erosion and Sedimentation Control permit).

Following excavation activities, ISE installed three (3) monitor wells (MW-1s, MW-1m and MW-1d) on the Nagy parcel and two (2) shallow monitor wells (MW-2 and MW-6) on the adjoining property to the west (Whitewater Township parcel – downgradient of the area of impaction). In addition, one deep groundwater grab sample (MW-6 – 14'-16' bgl)) was collected from the adjoining property to the west. Figure 3 depicts the grab groundwater sample and monitor well locations. MW-1s and MW-2 were completed with the aid of a hand auger and MW-1m, MW-1d, MW-6 and the groundwater grab sample were completed with direct push sampling equipment. Well logs depicting soil lithology, total well depth, etc. are contained as Attachment A. It should be noted that MW-1s, MW-1m and MW-1d were completed at the same location where soil sample TMW-1 was collected. The soil sample previously collected from TMW-1 produced the highest concentration of chlorides identified within Area D.

Groundwater samples were collected from each monitor well location using low-flow sampling equipment in January 2006 and submitted to SPL for chlorides analysis. The analytical laboratory results did not indicate the presence of chlorides in any of groundwater samples submitted for laboratory analysis at concentrations above its respective MDEQ Residential Drinking Water Criteria. Table 2 provides a summary of the analytical laboratory results.

Based on the excavation activities completed, pre-excavation soil sample results and groundwater sample results, ISE believes that no additional work in Area D is necessary.

Additional Response Measures

In addition to the work recently completed in Areas A-D, ISE, at the request of Cherry Blossom, scheduled the collection of drinking water samples from residential potable wells in the vicinity of the site. Figure 1 depicts the locations of the nearby potable wells.

Ms. Sy Paulik March 6, 2006 Page 6 of 6

The drinking water samples were collected by SOS Analytical, Inc. (SOS) in December 2005 and analyzed at their in-house laboratory for chlorides, arsenic, iron, manganese, nitrates, sodium sulfate, cyanide, fluoride and hardness. The analytical laboratory results did not identify elevated concentrations of the aforementioned parameters in any of the samples collected, with the exception of drinking water samples collected from the Jorgensen well and Bustance well. Table 4 summarizes the samples results collected from nearby potable wells.

The drinking water sample collected from the Jorgensen well indicated the presence of iron (9.19 mg/L) at a concentration above its respective residential drinking water value. Based on this result, SOS resampled the well and identified the presence of iron (0.06 mg/L) at a concentration well below its residential drinking water criteria. The first sample result is believed to be attributed to a laboratory anomaly and/or the type of interior piping present within the dwelling.

The sample collected from the Bustance well indicated the presence of nitrates (15.20 mg/L) above its residential drinking water criteria. Upon receipt of the analytical laboratory results, ISE contacted Mrs. Bustance and learned she is aware of the nitrate contamination and installed a reverse osmosis system in order to reduce nitrate levels to safe drinking water standards. The water sample collected by SOS personnel was taken prior to the treatment system.

It should be noted that both the Jorgensen and Bustance residences are located upgradient of the Cherry Blossom parcel and the associated storage ponds and brine pits and are likely situated within the adjoining Elk Lake Watershed.

Future Response Measures

Future response measures to be completed at this site have been included in a Remedial Investigation Work Plan (RIWP) that was prepared and submitted to the MDEQ on January 9, 2006. This plan addresses all known release areas and includes a scope of work to further evaluate the fate, transport and potential receptors of hazardous substances released at the site and plans for long-term monitoring of groundwater. Additional work will also be completed in the vicinity of SB-305 (Munro Road Ditch) to further evaluate groundwater chloride concentrations at this location.

If you have any questions regarding this status report, please do not hesitate to contact me at (231) 933-4041.

Sincerely,

INLAND SEAS ENGINEERING, INC.

R. Scott Rought, CHMM

Project Manager

cc: Michael Stifler, PE - MDEQ - Cadillac

Chris Hubbell - Cherry Blossom LLC

Joe Quandt - Zimmerman, Kuhn, Darling, Boyd, Taylor and Quandt

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FIGURES

Exemption 9, pages 8-10

TABLES

Table 1 Soil Analytical Results - Munro Ditch Pond Release Investigation Cherry Blossom LLC ISE Project #02061

Sample ID				MS-4s		SB-303			SB-304			SB-	305	
Sample Depth	Direct Contact Criteria & RBSLs	Drinking Water Protection Criteria &	0-1'	2-3'	6-7'	0-1'	2-3'	0-1'	2-3'	6-7'	0-1'	1-2'	2-3'	6-7'
Date Collected]	RBSLs		1/27/06		1/2	7/06		1/27/06			1/2	7/06	
Date Analyzed]			2/8/06		2/8	/06		2/8/06			. 2/8	/06	
EPA Method No.			325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2
Chloride (mg/kg)	500 (F)	5000	220	34	37	38	20	260	91	99	52	22	26	74
Soil Moisture (%)			14.6%	5.2%	4.6%	6.5%	5.4%	14.0%	10.8%	9.3%	14.9%	5.3%	7.0%	5.9%

NOTES:

NA: Not Analyzed

(F): Criterion is based on adverse impacts to plant life and

phytotoxicity

SB-130 Results analyzed by SOS Analytical

SB-303 Results analyzed by SPL

Table 1 Soil Analytical Results - Munro Ditch Pond Release Investigation Cherry Blossom LLC

ISE Project #02061

Sample ID				SB-306		SB-130		MS	5-5s		SB-307			
Sample Depth	Direct Contact Criteria & RBSLs	Drinking Water Protection Criteria & RBSLs	etion ja &	3'	0-1'	0-1' 1-2' 2-3' 3-4		3-4'	0-1'	6-7'				
Date Collected		RBSLs		1/27/06		12/5/05		1/2	7/06			1/26/06		
Date Analyzed			ļ		2/8/06		12/07/05		2/8	/06		,	2/8/06	
EPA Method No.			325.2	325.2	325,2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	
Chloride (mg/kg)	500 (F)	5000	78	20	26	584	150	56	43	38	40	170	130	
Soil Moisture (%)			10.6%	4.9%	3.4%	9.4%	21.7%	8.6%	12.2%	9.9%	23.0%	13.8%	16.9%	

NOTES:

NA: Not Analyzed

(F): Criterion is based on adverse impacts to plant life and

phytotoxicity

SB-130 Results analyzed by SOS Analytical

SB-303 Results analyzed by SPL

Table 1 Soil Analytical Results - Munro Ditch Pond Release Investigation Cherry Blossom LLC

ISE Project #02061

Sample ID			SB-	308		SB-309		Aver	ages along	ditch	Maxi	mum Obs	erved
Sample Depth	Direct Contact Protecti Criteria & RBSLs Criteria	Drinking Water Protection Criteria &	0-1'	2-3'	0-1'	2-3'	6-7'	0-1' (n=9)	2-3' (n=9)	6-7' (n=6)	0-1'	2-3'	6-7'
Date Collected		RBSLs	1/26/06			1/26/06		1/26-27/2006			1/26-27/2006		
Date Analyzed			2/8	3/06		2/8/06			2/8/06			2/8/06	
EPA Method No.			325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2
Chloride (mg/kg)	500 (F)	5000	91	78	66	250	80	111	81	74	260	250	130
Soil Moisture (%)			12.0%	12.0%	14.7%	11.6%	11.6%	14.7%	9.2%	8.6%	21.7%	13.8%	16.9%

NOTES:

NA: Not Analyzed

(F): Criterion is based on adverse impacts to plant life and

phytotoxicity

SB-130 Results analyzed by SOS Analytical

SB-303 Results analyzed by SPL

Table 2
Groundwater Analytical Results Munro Ditch and Wetland Area
Pond Release Investigation
Cherry Blossom LLC

ISE Project #02061

Sample ID		TMW-1	TMW-1	TMW-2	TMW-2	TMW-3	MW-1s	MW-1m	MW-1d
Screen Interval	Residential &	0-4'	0-4'	0-5'	0-5'	0-4'	0-4'	11-16'	20-25'
Date Collected	Commercial I	12/05/05	12/16/05	12/05/05	12/16/05	12/16/05	01/26/06	01/26/06	01/26/06
Date Analyzed	Drinking Water	12/07/05	12/19/05	12/07/05	12/19/05	12/19/05	02/01/06	02/01/06	02/01/06
Collection Method	Criteria and RBSLs	Peristaltic Pump	Low Flow	Peristaltic Pump	Low Flow				
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Dissolved Oxygen (mg/L)	1	NA	0.38	NA	0.36	0.20	NA	NA	NA
Temperature (degs C)		NA	2.5	NA	3.7	3.0	NA	NA	NA.
рН		NA	7.95	NA	8.05	7.97	NA	NA	NA
Conductivity (mS/cm)		NA	1.69	NA	1.00	0.828	NA	NA	NA
Chloride (mg/L, PPM)	250	184	52	47	47	48	21	14	13

NOTES:

NA: Not Analyzed

(E) -Criterion is the aesthetic

drinking water value

DWC - Residential & Commercial I Drinking Water Criteria & RBSLs

TMW-1 - Samples analyzed by SOS Analytical

TMW-1 - Samples analyzed by SPL

Table 2 Groundwater Analytical Results Munro Ditch and Wetland Area Pond Release Investigation Cherry Blossom LLC

ISE Project #02061

Sample ID		MW-2	MW-4s	MW-5s	MW-6	MW-6	SB-305
Screen Interval	Residential &	0-4.25'	7-12'	10.5-15.5'	1-6'	14-16'	14-16'
Date Collected	Commercial I	01/26/06	01/27/06	01/27/06	01/26/06	01/26/06	01/27/06
Date Analyzed	Drinking Water	02/01/06	02/01/06	02/01/06	02/01/06	02/01/06	02/01/06
Collection Method	Criteria and RBSLs	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	GRAB-Peristaltic Pump	GRAB-Peristaltic Pump
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325,2	EPA 325.2
Dissolved Oxygen (mg/L)		NA	NA	NA	NA	NA	NA NA
Temperature (degs C)		NA	NA	NA	NA	NA	NA
pН		NA	NA	NA	NA	NA	NA
Conductivity (mS/cm)		NA	NA	NA	NA	NA	NA
Chloride (mg/I., PPM)	250	123	186	161	161	39	303

NOTES:

NA: Not Analyzed

(E) -Criterion is the aesthetic

drinking water value

DWC - Residential & Commercial I Drinking Water Criteria

TMW-1 - Samples analyzed by SOS Analytical

TMW-1 - Samples analyzed by SPL

Table 3

Excavation Verification Soil Analytical Results

Pond Release Investigation
Cherry Blossom LLC

ISE Project #02061

Sample ID		SB-200	SB-201	SB-202	SB-203	SB-204	SB-205	SB-206	SB-207
Sample Location Sample Depth	Direct Contact Criteria &	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected	RBSLs	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed]	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab							
Analytical Method No.		EPA 325.2							
Chloride (mg/kg, FPM)	500 (F)	34	95	78	13	22	<11	28	<16
Soil Moisture (%)		15.8	34.8	15.2	18.2	26.8	8.9	29.1	36.1

NA: Not Applicable
All results in mg/kg (Dry weight)
(F): Criterion is based on adverse impacts to plant life and

phytotoxicity

Table 3

Excavation Verification Soil Analytical Results

Pond Release Investigation
Cherry Blossom LLC
ISE Project #02061

Sample ID		SB-208	SB-209	SB-210	SB-211	SB-212	SB-213	SB-214	SB-215
Sample Location Sample Depth	Direct Contact Criteria &	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected	RBSLs	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed	ŀ	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab							
Analytical Method No.		EPA 325.2							
Chloride (mg/kg, PPM)	500 (F)	<12	<11	26	23	16	<15	98	16
Soil Moisture (%)		15.1	10.6	27.2	25.0	16.9	34.9	32.4	29.1

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Table 3
Excavation Verification Soil Analytical Results
Pond Release Investigation
Cherry Blossom LLC
ISE Project #02061

Sample ID		SB-216	SB-217	SB-218	SB-219	SB-220	SB-221	SB-222	SB-223
Sample Location Sample Depth	Direct Contact Criteria &	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected	RBSLs	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed]	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method	7	Grab							
Analytical Method No.]	EPA 325.2							
Chloride (mg/kg: PPM)	500 (F)	32	<11	30	<13	<12	85	24	16
Soil Moisture (%)		31.0	9.7	13.3	25.5	16.9	55.2	14.1	13.2

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Table 3

Excavation Verification Soil Analytical Results
Pond Release Investigation
Cherry Blossom LLC
ISE Project #02061

Sample ID		SB-224	SB-225	SB-226	SB-227	SB-228	SB-229	SB-230
Sample Location Sample Depth	Direct Contact Criteria &	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected	RBSLs	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed	·	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab						
Analytical Method No.	7	EPA 325.2						
Chloride (mg/kg, PPM)	500 (F)	75	20	<13	18	120	<16	42
Soil Moisture (%)		25.7	30.9	22.1	6.5	33.3	37.9	33.1

NA: Not Applicable All results in mg/l;g (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Table 3

Excavation Verification Soil Analytical Results
Pond Release Investigation
Cherry Blossom LLC

ISE Project #02061

Sample ID		SB-231	SB-232	SB-233	SB-234	SB-235	SB-236	SB-237
Sample Location Sample Depth	Direct Contact Criteria &	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected	RBSLs	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab						
Analytical Method No.		EPA 325.2						
Chloride (mg/kg, PPM)	500 (F)	30	<13	<11	<12	12	34	24
Soil Moisture (%)		10.1	24.8	10.6	19.5	14.9	25.6	29.4

NOTES:

NA: Not Applicable
All results in mg/kg (Dry weight)
(F): Criterion is based on adverse impacts to plant life and phytotoxicity
Results analyzed by SPI. Analytical

Table 3
Excavation Verification Soil Analytical Results
Pond Release Investigation
Cherry Blossom LLC
ISE Project #02061

Sample ID	-	SB-238	SB-239	SB-240	SB-241	SB-242	SB-243	SB-244
Sample Location Sample Depth	Direct Contact Criteria &	1.5'	1.5'	10"	18"	18"	9" .	18"
Date Collected	RBSLs	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2					
Chloride (mg/kg, l'PM)	500 (F)	11	41	22	23	79	<15	12
Soil Moisture (%)		11.5	19.5	28.7	11.3	16.7	34.2	14.8

NA: Not Applicable
All results in mg/kg (Dry weight)
(F): Criterion is based on adverse impacts to plant life and phytotoxicity

Table 3
Excavation Verification Soil Analytical Results
Pond Release Investigation
Cherry Blossom LLC
ISE Project #02061

Sample ID		SB-250	SB-251	SB-252	SB-253	SB-254	SB-255
Sample Location Sample Depth	Direct Contact Criteria &	Sand Fill Verification 1'	Sand Fill Verification 1'	Sand Fill Verification 1'	Topsoil Fill Verification 0.5'	Topsoil Fill Verification 0.5'	Topsoil Fill Verification 0.5'
Date Collected	RBSLs	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Date Analyzed]	12/20/05	12/20/05	12/20/05	12/20/05	12/20/05	12/20/05
Collection Method]	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, PPM)	500 (F)	<10	13	22	14	24	15
Soil Moisture (%)		3.7	3.3	5.2	9.7	12.9	11.0

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Table 4 **Area Pumping Well Sample Results** Cherry Blossom, LLC ISE Project #02061-59E

Sample ID			Richard Monroe	Ken Hogarth	C. Boals	C. Boals (Rental)	Edward Kinnee	Randall J	orgensen	Migrant Camp	Cal Nagy	William Bustance	North Building
Sample Location		Residential & Commercial I	Kitchen Sink	Kitchen Sink	Outside Well	Outside Well	Kitchen Sink	Pressure Tank	Outside Spigot	Outside Well	Pressure Tank	Pressure Tank	Proposed Well
Sampler (Affiliation)	Analytical Method No.	Drinking Water Criteria and RBSLs	J. Nolan (SOS)	J. Nolan (SOS)	J. Nolan (SOS)	J. Nolan (SOS)	J. Nolan (SOS)	J. Nolan (SOS)			J. Nolan (SOS)	J. Nolan (SOS)	B. Smith (Cherry Blossom)
Date Collected		KDSLS	12/21/2005	12/21/2005	12/20/2005	12/21/2005	12/21/2005	12/22/2005	1/6/2006	12/21/2005	12/21/2005	12/21/2005	10/13/2005
Date Analyzed			12/29/2005	12/29/2005	12/29/2005	12/29/2005	12/29/2005	12/29/2005	1/9/2006	12/29/2005	12/29/2005	12/29/2005	10/14/2005
Time Sampled			4:45pm	5:15pm	2:36pm	2:41pm	2:45pm	5:00pm	1:45 pm	3:37pm	2:30pm	3:22pm	
Arsenic	EPA 200.9	0.01 (A)	<0.002	<0.002	< 0.003	< 0.003	< 0.003	< 0.002	NM	< 0.003	< 0.003	< 0.003	NM
Chloride	EPA 300.0	250	2.53	6.02	2.93	14.80	96.40	18.60	NM	5.57	30.90	94.60	8.90
Conductivity	SM2510-B	NA	334	413	342	390	967	440	NM	409	423	721_	NM
Iron	SM3111 Fc-B FLAA	.3 (E - 2.0)	1.23	< 0.05	0.66	0.89	0.22	9.19	0.06	< 0.05	0.16	0.22	0.57
Manganese	SM3111 Mn-B FLAA	.05 (E - 0.86)	< 0.02	<0.02	0.07	0.15	0.41	0.23	NM	< 0.02	< 0.02	<0.02	NM
Nitrogen, Ammonia	EPA 350.1	10	<0.05	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	NM	< 0.05	< 0.05	< 0.05	NM
Nitrogen, Nitrate	EPA 300.0	10	<0.1	6.28	< 0.15	< 0.15	3.58	6.83	NM	1.82	6.03	15.20	<0.1
Nitrogen, Nitrite	EPA 300.0	1	< 0.05	<0.05	< 0.005	< 0.005	0.078	<0.05	NM	< 0.005	0.011	<0.005	< 0.05
pH (s.u.)	EPA 150.1	6.5-8.5	NM	NM	NM	NM	NM.	NM	8.4	NM	NM	NM	NM
Sodium	SM3111B	125	1.95	1.45	1.62	4.81	50.30	9.94	NM	1.46	8.04	39.70	9.14
Sulfate	EPA 300.0	250	42.10	26.90	37.10	30.90	57.60	31.40	NM	23.10	19.70	33.70	18.40
Cyanide - Total	SM4500 CN-C/E	0.2 (A)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	< 0.010
Fluoride	EPA 300.0	2.0 (E)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	<0.2
Hardness (Calc)	SM2340-B	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	165.00

NOTES:

All results are listed in mg/L

NM - Not Measured

NA - Not Analyzed

Health Based Criteria noted in parantheses

ATTACHMENT A:

SOIL BORING AND MONITOR WELL LOGS



BORING/WELL:

MW-1s

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

	T IQCITIII	g 610.467.0555	Orana Trave	ise County, wichig	μιι 				
DE	PTH		SOIL DESCRIPTION AND COMMENT	rs	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		DEPTH
									_
		GRADE	Top soil		1		\		
	,		lay, dark brown, moist						 -
			trace silt, brown, mo	ist	7				
			to fine, tan to black, v		100	AH			
					.				
		CLAY, some silt, gray			 				5
-		End of boring =	4.5 feet - Hammer Dri	iven Point Refus	ed			1	
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	10								10
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	35				1			1	35
									
rilling	Contrac	ctor:	Driller:		Drilling Meth	od:		Date Drilled:	
		ngineering	RSR		Hand Auger			1/26/20	006
ggeo	l By:		Logging Method:	Development Meth	iod:		Project #:		
SR			ASTM D 2488-90	Peristaltic Pump	- · ·		02 061		
	Type:		Screen Type & Length:	Ground Elevation:	1	g Elevation:		Sheet Numl	oer:
' PVC		···	2" - 5' / 10 Slot	NA	NA			1 of 1	



BORING/WELL:

SB-301 / MW-1m

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

Flushing	810.487.0555	Grand Trave	rse County, Michiga	an				
DEPTH	s	OIL DESCRIPTION AND COMMENT	'S	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		DEPTH
				}			1	
,	GRADE	Topsoil						-
-	SAND, few silt, few cla	y, dark brown, moist						
		race silt, brown, mo		4	MS			
	SAND, mealum to	o fine, tan to black, v	vei	1	1	1 1		
5 5	LAY. some silt. gray.	moist to wet (~4")		7				5
					MS			
	SAND, fine, brow	n, wet			}			
10					MS			10
				}				
				}	MS			45
15					İ			15
	nd of boring = 1	6 feet.						
				}			1	
						, ,		20
25							1	25
_				i				
				1		1		
30								30
-								
35								35
Drilling Con ract	or:	Oriller:		Drilling Meth	nod:		Date Drilled:	
Environmental		Bill	TB	Geo Probe		D	1/26/20)06
Logged By:	1	ogging Method:	Development Meth	od:	I	Project #:		ļ
Tim Gates Casing Type:		ASTM D 2488-90 Screen Type & Length:	Peristaltic Pump Ground Elevation:	Top of Casir		02 061	Sheet Numb	per:
1" Pvc	4.7				-			



BORING/WELL:

SB-301 / MW-1d

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

Flushing	810.487.0555	Grand Trave	rse County, Michig	an	-			
DEPTH		SOIL DESCRIPTION AND COMMENT	rs	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	Well Diagram	DEPTH
 	OBAIDE.	Tanasii						
	GRADE	Topsoil clay, dark brown, molst		ļ		 	10000	
r		, trace silt, brown, mo	iet	-	мѕ	1 1		
<u> </u>	SAND medium	to fine, tan to black, v	vot	1	1010			
t	Oznas, mediam	to mio, tan to black, t		1				
5 	CLAY. some silt. gra	y, moist to wet (~4")			MS			5
10 	SAND, fine, bro	wn, wet			MS			10
15					MS			15
					MS			
2:0 					MS			20
25]				25
	End of boring =	25 feet.						
_ [
_								_
- 30								20
30				}				30
- 1]]			1	
_							1	
_							1	_
35				1			1	35
Orilling Contract	tor	Driller:		Drilling Meth	nod,	I	Date Drilled:	
_		1		ľ	iou.		i	ne l
ogged By:	Investigations	Bill Logging Method:	Development Meth	Geo Probe		Project #:	1/26/20	סטי
im Gates		ASTM D 2488-90	Peristaltic Pump			02 061		:
asing Type:		Screen Type & Length:	Ground Elevation:	Top of Casir			Sheet Numb	er:
"Pvc		1" - 5' / 10 Slot	NA	NA			1 of 1	
		11 - 0 7 10 0100	1.443	1.07.			10:1	



BORING/WELL:	
	5.0

MW-2

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

1 (100	19 0 101401 10000		,,]			
DEPTH		SOIL DESCRIPTION AND COMMENT	s	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		DEPTH
					ļ			
	GRADE	Top soil						_
		trace sand, black, mo	oist	- 		 		
	SAND, medium, tan, moist			_				
	SAND, fine to m	edium, tan, moist		100	HA			
				_		1 1		
5	CLAY, some silt, gray		inco Doint Dofu		*******	1		5
	End of boring =	4.25 feet - Hammer Di	riven Point Ketu	sea on 3 a	ttempts 			
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 30								30
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35]			1	35
Drilling Contra	ctor:	Driller:		Drilling Meth		<u> </u>	Date Drilled:	
Inland Seas E		RSR		1			1/26/20	ne
Logged By:	-11Aurae: 111A	Logging Method:	Development Meth	Hand Auger nod:		Project #:	1/20/20	700
RSR		ASTM D 2488-90	Peristaltic Pump			02 061		
Casing Type:		Screen Type & Length:	Ground Elevation:	Top of Casin	g Elevation		Sheet Numl	per:
2" PVC		2" - 5' / 10 Slot	NA	NA			1 of 1	



H()	KII	ΝG	w	ы.	٠.

MW-3

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

	ig 810.487.0555		erse County, Michig	an				
DEPTH		SOIL DESCRIPTION AND COMMEN	JTS	PERCENT RECOVERY	Pocket Penetrometer	TYPE & INTERVAL		DEPTH
	ļ 	SOIL DESCRIPTION AND COMMEN				III I		<u> </u>
_ _]			
_				ł	[]	ļ	l	ļ
-	GRADE	Field Grass				1		
		race gravel, fine, brow	n. moist	 				_
- -				MS]			1
_					ļ ,	444		
_ ·	CLAY, hard, bro	own, moist			4.5 max			4'
5				MS	ļ [5_
- <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	SAND, Medium,	. brown. wet		- 1013]			
- - <u>-</u>	CLAY, stiff, bro			-	1.5			8'
-				_	ĺ		\sim	1
10	SAND, medium,	, brown, wet		MS				10_
- —	CI AV von -4:55	i brown maiet		7	3.25			12'
- <u>▼</u> -	CLAY, very stiff SAND, medium,	, brown, moist . brown, wet		-	3.25	2000		12
-	,, , , , , , , , , , , , , , , ,			MS				
15	1			1	3			15_
	CLAY, very stiff	, brown, moist						
-					4.5			401
	CLAY, hard, bro	wn moist		MS	4.5 max			18'
20		, mi, moist						20
	SAND, medium, grey, wet (4			MS				
	CLAY, hard, gre				4.5 max			22'
· $\frac{1}{25}$	SAND, medium,	arev wet		KS				25
	DAND, Medicini,	gicy, wet		SP				20_
	End of boring =	26 feet.						
					1			
30						1		20
								30
	·							
35								35
Iling Contra	ctor:	Driller:		Drilling Meth	nod:		Date Drilled:	
-	al Investigations	Bill		Geo Probe			1/26/2	006
gged By:		Logging Method:	Development Meti		F	Project #:		
n Gates		ASTM D 2488-90	Peristaltic Pump			2 061		
sing Type		Screen Type & Length:	Ground Elevation:	Top of Casin	ng Elevation:		Sheet Num	ber:
Pvc		1" - 5' / 10 Slot	NA	NA			1 of 1	



BORING/WELL:

SB-302 / MW-6

PREPARED FOR: Cherry Blossom

10190 Munro Road Whitewater Township Grand Traverse County, Michigan

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

	810.487.0555	Grand Trave	rse County, Michiga	ın				
DEPTH	SOIL DESCRIF	PTION AND COMMENT	s	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		DEPTH
_								
-					}	1 1		
-								
_	RADE Field Gr	rass		1				
s	AND, fine, some organi		oist					
	ANID C. A. 114			4	MS			_
<u></u> <u>s</u>	AND, fine, trace silt, gro	ey, moist	· · · · · · · · · · · · · · · · · · ·	-				
5					į			5
					MS			
							\longrightarrow	
					İ			
- 10	AND, fine to medium, b	rown wet			MS			10
10 3	AND, line to medium, b	iown, wet		į	I WIS	[[10
]			
					MS	1000	3	4.5
15		•			SP			15
- E	nd of boring = 16 feet.		· · · · · · · · · · · · · · · · · · ·				\$ 10101013 (WWW) 1010101010	
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35								35
rilling Contracto				Drilling Meth	nod:		Date Drilled:	
nvironmental	Investigations Bill	Aethod:	Development Meth	Geoprobe		Project #:	1/26/20	006
ogged By:	Logging M		1	ou.		ì		
Im Gates asing Type:	ASTM D 2	2488-90 /pe & Length:	Peristaltic Pump Ground Elevation:	Top of Casi		02 061	Sheet Numb	per:
"Pvc	1" - 5' / 10			NA	=		1 of 1	
	1 - 3 / 10	, JIVL	PAG	1.17		<u></u>	1011	· · · · · · · · · · · · · · · · · · ·



BORING/WELL: MW-4s

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

Flushin	ıg 810.487.0555	Grand Traver	se County, Michig	an		· .		
DEPTH		SOIL DESCRIPTION AND COMMENT	s	Sampling Method/ Recovery	Pocket Penetrometer	TYPE & INTERVAL	Well Diagram	DEPTH
5 5	SAND, fine to me silt, trace organist, trace organist, trace organist, trace organist, trace organist, trace clay, gray SAND, fine to me trace clay, dark brown	Field Grass dium, trace cobble to gra trace organics, dark brove edium, trace ccoarse sanics, light brown, moist to silt, trace medium sand, few fine sand, trace coa wet little fine sand, trace gray to dark gray, wet	avel, trace coarse wn to gray, moist and, trace to dry tan, moist arse sand, avel, trace silt, arse sand,	Method/		INTERVAL	Well Diagram	5
		stiff to hard, moist	oo dana,	(90%)	4.5 @ 17.5	10000		20
25 25 								25
30 30 								30
35		T						35
Orilling Contra		Driller:		Drilling Met			Date Drilled:	
	al Investigations	Bill	ID	Geo Probe		Desir 12	1/27/2	006
Logged By:		Logging Method:	Development Meth	nod:		Project #:		
LCM		ASTM D 2488-90	Peristaltic Pump	Trans - 5 C . 1		02 061	Object 11	
Casing Type:		Screen Type & Length:	Ground Elevation:	1	ing Elevation:	}	Sheet Numb	er:
Pvc		1" - 5' / 10 Slot	NA	NA			1 of 1	}



BORII	NG/	WE	LL
-------	-----	----	----

MW-5s

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690

1 '	iue IIII	g 010.407.0333	Grand Have		411		•		
DEP	тн	s	OIL DESCRIPTION AND COMMEN	TS	Sampling Method/ Recovery	Pocket Penetrometer	TYPE & INTERVAL	Well Diagram	DEPTH
			Field Grass	e organics, black to grav moist					
	5	CLAY, some fine sand SAND, fine to medium, the dark brown, moist SAND, fine to med moist, Dark brown be- SAND, some clay, few sit, trace		noist coarse sand, trace clay, ce silt, brown,	MS (90%) MS (90%)				5 5 10
	<u>∇</u> . 15	SAND, fine to medi	lium, trace silt, light b		(90%) KS (90%) KS (90%)				
	20	End of boring ≔ 18	feet.						20
	25								25
	30								30
	35		Della		Deilling 1844			Deta Della	35
Drilling C			Oriller:		Drilling Meth	100:		Date Drilled:	
			Bill	IDevel	Geo Probe		Dec! 4 4	1/27/2	006
Logged I	ву:	1	ogging Method:	Development Meth	od:		Project #:		
LCM	<u> </u>		ASTM D 2488-90	Peristaltic Pump	Top of Co. 1	a Claus "	02 061	Object No. 1	
Casing 1	yp-∋:	i i	Screen Type & Length:	Ground Elevation:		ng Elevation:	Ì	Sheet Numb	per:
1" Pvc		<u>1</u>	1" - 5' / 10 Slot	NA	NA		<u> </u>	1 of 1	



SB-303

LOCATION:

10190 Munro Road

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road

10190 Munro Road Whitewater Township Williamsburg, Michigan 49690 Traverse City 231-933-4041 Flushing 810-487-0555						
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH
	Grass	050				
5 SAND, fine to me	edium, trace coarse sand, light brown, dry to moist edium, trace gravel, trace silt, trace clay, red-brown, lay & silt enriched in thin crossbeds (<.25")	95%	MS MS			5
10 trace clay, light SAND, fine to me dark gray, mois	dium, trace gravel, trace coarse sand, trace silt, t to wet	95%	MS			10
15 15 15 	S = 13.0 Feet Below Grade					15
20 						20
25 						25
30 						30
Environmental Investigations			od: Beoprobe		Date Drilled	2006
Logged By: LCM	Logging Method: ASTM D 2488	Project #:	2061-59E		Sheet Num 1 o	



SB-304

LOCATION:

10190 Munro Road

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road

	Whitewater Township Williamsburg, Michigan 49690 averse City 231-933-4041 Grand Traverse County, Michigan Flushing 810-487-0555						
DEPTH		SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH
	GRADE	Grass					
	SAND, little gravel, few SAND, fine to medium, sand, dark brown, moist	clay, few organics, trace silt, dark brown to black, moist few to trace silt, few to trace clay, trace gravel to cobble, trace coarse t	70%	MS			
5 		dium, little to few gravel to cobbles, few to trace clay, trace coarse sand, dark brown, moist	90%	MS			5
10 	SAND, fine to med	dium, trace coarse sand, brown to gray, moist	90%	MS			10
— — <u>⊽</u> 15	SAND, fine to medium, t	few coarse sand, trace gravel, trace silt, trace clay, brown, moist to wet	80%	KS			15
<u> </u>	CLAT, Some line sar	nd, few silt, trace coarse to medium sand, gray, moist to wet = 15.0 Feet Below Grade					20
25 							25
30 							30
Drilling Co-	tractor:	Driller:	Drilling Metho	nd:		Date Drilled	
	rital Investigations	REX	G	eoprobe		1/27/2	2006
Logged By:	LCM	Logging Method: ASTM D 2488	Project #:	2061-59E		Sheet Num 1 o	- 1



SB-305

PREPARED FOR:

LOCATION:

10190 Munro Road

Cherry Blossom LLC 10190 Munro Road

Traverse City 23	10190 Munro Road Whitewater Township Traverse City 231-933-4041 Flushing 810-487-0555 10190 Munro Road Whitewater Township Williamsburg, Michigan 49690 Williamsburg, Michigan						
DEPTH		SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH
SAND	little clay, few on	Grass ganics, few silt, gray to dark brown to black to red, moist to wet dium, few to trace silt, brown to dark brown, moist. hin, dark brown crossbeds (<.5")	95%	MS			5
SAND), fine to med	few clay, trace coarse sand, trace silt, brown to dark brown, moist clium, trace silt, light brown to black, dry to moist intain magnetite, crossbedded (<.25" thick)	95%	MS			
10		flum, few silt, trace clay, grayish brown, moist to wet	75%	MS			10
15 15		lium, trace fine gravel, trace coarse sand, trace	60%	KS SP KS			15
silt, t	trace clay, d	ark gray, wet	95%	KS			20
E:ND (OF BORING	= 20.0 Feet Below Grade					
25 							25
30							30
_							
Drilling Contractor: Environmental In	i i	Driller: REX	Drilling Metho	od: Seoprobe		Date Drilled	ì
Logged By:		Logging Method: ASTM D 2488	Project #:	2061-59E		Sheet Numl	рег:



LOCATION:

10190 Munro Road

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road

Whitewater Township Williamsburg, Michigan Traverse City 231-933-4041 Flushing 810-487-0555 Whitewater Township Williamsburg, Michigan Flushing 810-487-0555					oad Jan 49690		
DEPTH		SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH
	CLAY, some fine sand, few silt	Grass Ley, few silt, few organics, trace gravel, gray to dark brown, moist trace coarse sand, grav, soft, moist 1, few clay, trace silt, brown, moist. Layered	95%	MS		0.25	
5 5 		dium, trace coarse sand, tan to red-brown, dry to moist	75% 75%	MS MS		4.5	5
10	SAND, fine to medium, END OF BORING	www.silt, trace gravel, trace coarse sand, dark brown, hard to very stiff, moist few silt, few clay, trace coarse sand, brown to dark brown, moist = 10.0 Feet Below Grade	70%			3.5 2.25	10
10							20
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30							30
Drilling Cor		Driller:	Drilling Metho	od: Seoprobe		Date Drilled	
Logged By:	LCM		Project #:	2061-59E		Sheet Num	ber:



LOCATION:

10190 Munro Road Whitewater Township

Cherry Blossom LLC 10190 Munro Road

PREPARED FOR:

Williamsburg, Michigan 49690 Traverse City 231-933-4041 **Grand Traverse County, Michigan** Flushing 810-487-0555 PERCENT SAMPLE TYPE & POCKET **DEPTH** DEPTH SOIL DESCRIPTION AND COMMENTS RECOVERY **INTERVAL** PEN (TSF) METHOD **GRADE** Grass CLAY, little silt, few organics, trace gravel, trace sand, black to dark gray, firm to stiff, moist 0.6 - 2.25SAND, fine to medium, trace coarse sand, trace clay, dark gray, moist 95% MS PRGANIC SILT, little clay, few fine sand, black, moist

LAY, some fine sand, little slit, trace coarse sand, light gray, very stiff to firm, moist 3.0-0.7 SAND, fine to medium, few coarse sand, few to trace clay, trace silt, MS trace organics, light gray to dark gray, moist to wet 95% < 0.25 CLAY, little sirt, few fine sand, few organics, trace medium sand, gray to dark brown, very soft, moist SAND, fine to medium, some to little clay, few gravel, trace silt, dark gray, moist SAND, fine to medium, few coarse sand, trace silt, light brown, moist to wet 10 END OF BORING = 8.0 Feet Below Grade 15 20 25 25 30 Driller: **Drilling Method: Drilling Contractor:** Date Drilled: 1/26/2006 Environmental Investigations REX Geoprobe Project #: Logged By: Logging Method: Sheet Number: LCM **ASTM D 2488** 02061-59E 1 of 1



LOCATION:

10190 Munro Road

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road

Traverse City 231-933-4041 Flushing 810-487-0555	10190 Munro Road Whitewater Township Grand Traverse County, Michigan			90 Munro R urg, Michiç		
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH
GRADE JLAY, some fine to mediu SAND, fine to meditrace clay, brown 5 CLAY, little fine sa	Grass m sand, few gravel, few slit, few organics, dark gray to brown, very soft moist dium, little to few gravel, trace coarse sand, trace silt, to dark gray, moist to wet and, few silt, grayish brown, moist G = 4.0 Feet Below Grade				<0.25	5 10 15 20 25
30 30 Drilling Contractor:	Driller:	Drilling Metho	od:		Date Drilled	30
Environmental Investigations			Seoprobe		1/26/2	2006
Logged By:	Logging Method:	Project #:	0004		Sheet Numl	
LCM	ASTM D 2488	1 0	2061-59E		1 01	1



LOCATION:

10190 Munro Road

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road

	e City 231-933-4041 rg 810-487-0555	10190 Munro Road Whitewater Township Grand Traverse County, Michigan	10190 Munro Road Williamsburg, Michigan 49690				
DEPTH		SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH
							_
	GRADE	Grass					_
		ew silt, few organics, trace gravel, trace coarse sand, dark brown, firm, moist				0.75	
	SAND, fine to medium, tra	ce gravel, trace silt, trace clay, brown, moist	90%	MS			_
	CLAY, some sand few sift, br		1	,			_
		lium, trace gravel, trace silt, trace clay, brown, moist					
5		le fine-med sand, few silt, trace coarse sand, brown to tan,				0.4	5
	soft to firm, moi	st. Coarsens down.	90%	MS	m	0.75	_
<u>▼</u>			1				
		de gravel, trace silt, trace clay, dark gray to brown, moist to	wet				_
	IEND OF BORING	G = 8.0 Feet Below Grade					
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rilling Con			Drilling Metho		,	Date Drilled:	
	ntal Investigations			Seoprobe		1/26/2	
ogged By:		Logging Method:	Project #:		-	Sheet Num	
	LCM ASTM D 2488 02061-59E 1 of 1			E 4			



LOCATION:

10190 Munro Road **Whitewater Township**

PREPARED FOR:

Traverse City 231-933-4041 Flushing 810-487-0555		Grand Traverse County, Michigan	Williamsburg, Michigan 49090						
DEPTH		SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH		
5	SAND, fine to medium, some clay, some fine sand, few silt. SAND, little gravel SAND, fine to medi Wet at clay interfactory, little fine sand, few sand, fine to medium, silt. They day, trace fine sand, little clay, trace so CLAY, some sand	Grass any, few silt, few organics, trace gravel, gray to dark brown, moist trace coarse sand, orav. soft moist I, few clay, trace silt, brown, moist. Layered fum, trace coarse sand, tan to red-brown, moist to wet tace but not able to produce water for sampling w silt, trace gravel, trace coarse sand, dark brown, hard to very stiff, moist tew silt, few clay, trace coarse sand, brown to dark brown, moist	100%	HA	INTERVAL		5		
	as Engineering	TJG/LCM		od: and Auger		Date Drilled	2006		
Logged By:	LCM	Logging Method: ASTM D 2488	Project #: 0	2061-59E		Sheet Numb			



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LOCATION:

SW of Intersection-Angell and Munro Roads

PREPARED FOR:

Cherry Blossom LLC 10190 Munro Road

Traverse City 231.933.4041 Flush ng 810.487.0555 Sw of Intersection-Angell and Munro Roads Parcel #13-117-002-00 Williamsburg, Michigan 49690 Whitewater Township, Grand Traverse County								
DEPTH	SOI	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE	Grass						
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 	ORGANIC SILT,	little fine sand, few clay, black, moist	НА					
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Drilling Cor	ntractor:	Driller:	Drilling Me	thod:		Date Drill	ed:	
Inland S Logged By:	Seas Engineering	B. Egan	Project #:	Hand Auger		Sheet Nu	11/23/05	
Loggeo by:	i i3. Egan	Logging Method: ASTM-D 2488-00	Jeroject #.	02061-59E		Ollegt M	1 of 1	



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LOCATION:

SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00 Whitewater Township, Grand Traverse County PREPARED FOR:

	se City 231.933.4041 ning 810.487.0555	Parcel #13-117-002-00 Whitewater Township, Grand Traverse County			Williamsb	sburg, Michigan 49690		
DEPTH	SOI	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
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	GRADE	Grass						
	ORGANIC SILT,	little fine sand, few clay, black, moist	НА					
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Drilling Cor	Lntractor:	Driller:	Drilling Me	thod:		Date Drill	ed:	
	Seas Engineering	B. Egan		Hand Auger			11/23/05	ļ
Logged By:		Logging Method:	Project #:			Sheet Nu		
	3. Egan	ASTM-D 2488-00	1	02061-59E			1 of 1	
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LOCATION:

SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00

PREPARED FOR:

	Traverse City 231.933.4041 Whitewater Township, Flushing 810.487.0555 Grand Traverse County							
DEPTH	SOI	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE	Grass		!				
		few organics, trace silt, brown, moist						
 		few fine sand, few clay, black, moist	НА					
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Orilling Cor	l niractor:	Driller:	Drilling Me	thod:		Date Drill	 ed:	
Inland S	Seas Engineering	B. Egan		Hand Auger			11/23/05	
ogged By:	B. Egan	Logging Method: ASTM-D 2488-00	Project #:	02061-59E	ļ	Sheet Nu	mber: 1 of 1	
	G. Eyali	A31181-D 2400-D0	1	02001-38E			1 01 1	L



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LOCATION:

SW of Intersection-Angell and Munro Roads
Parcel #13-117-002-00
Whitewater Township,
Grand Traverse County

PREPARED FOR:

	e City 231.933.4041 ning 810.487.0555	Parcel #13-117-002-00 Whitewater Township, Grand Traverse County			Williamsbu	urg, Mich	igan 49690	
DEPTH	SOI	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE	Grass			777			
		trace silt, trace organics, brown, moist	НА					1
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Drilling Cor	tractor:	Driller:	Drilling Me	thod:	1	Date Drille	ed:	
	mactor: Seas Engineering	B. Egan	J. III. Ig III.	Hand Auger		_ = = = = = = = = = = = = = = = = = = =	11/23/05	
Logged By:		Logging Method:	Project #:		,	Sheet Nu	mber:	
	B. Egan	ASTM-D 2488-00	<u> </u>	02061-59E			1 of 1	



1	ISOI	L BORING

LOCATION:

SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00

PREPARED FOR:

	e City 231.933.4041 ang 810.487.0555		Whitewater Township, Grand Traverse County						
DEPTH	SOI	L. DESCRIPTION AN	ND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	DEPTH	
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	GRADE	·	Grass						
 		little fine sand,	few clay, black, moist	НА					
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Orilling Co	atua otor:	Driller:	· · · · · · · · · · · · · · · · · · ·	Drilling Met	thod:		Date Drill	ed:	
Orilling Cor	nractor: Seas Engineering	Daller:	B. Egan	Toming Me	noa: Hand Auger		Date Dilli	ea: 11/23/05	
ogged By:		Logging Method:		Project #:			Sheet Nu	mber:	
	B. Egan	AS	TM-D 2488-00		02061-59E		·	1 of 1	



ı	SO	IL BORING	•

LOCATION:

SW of Intersection-Angell and Munro Roads
Parcel #13-117-002-00
Whitewater Township.

PREPARED FOR:

	E City 231.933.4041 ing 810.487.0555								
DEPTH	SOI	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH	
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	GRADE	Grass							
	SAND, few clay,	few organics, trace silt, brown, moist				1			
 	ORGANIC SILT,	few fine sand, few clay, black, moist	НА					_	
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rilling Conf	tractor:	Driller:	Drilling Me	thod:		Date Drille	ed:	 	
	eas Engineering	B. Egan	2,,	Hand Auger	ľ		11/23/05		
ogged By:	- Linguiseiling	Logging Method:	Project #:	Hand Augel		Sheet Nu			
	₿. Egan	ASTM-D 2488-00		02061-59E	-		1 of 1		



SOI	L BO	RIN	١G

LOCATION:

SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00

PREPARED FOR:

Traverse City 231.933.4041 Whitewater Township, Flushing 810.487.0555 Grand Traverse County								
DEPTH	SOIL	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE	Grass trace organics, trace silt, brown, moist						
	ORGANIC SILT,	few fine sand, few clay, black, moist	HA					1
	L	1.0 Feet below grade						- -
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Orilling Con	ntractor: Seas Engineering	Driller: B. Egan	Drilling Me	thod: Hand Auger		Date Drill	ed: 11/23/05	
ogged By:		Logging Method: ASTM-D 2488-00	Project #:	02061-59E		Sheet Nu		



SOIL BORING:

SB-108

LOCATION:

SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00 Whitewater Township, Grand Traverse County PREPARED FOR:

	e City 231.933.4041 ing 810.487.0555	Parcel #13-117-002-00 Whitewater Township, Grand Traverse County			Williamsb	msburg, Michigan 49690		
DEPTH	SOI	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL			
	GRADE SAND, few clay.	Grass few organics, trace silt, brown, moist			111	 		
 1		little clay, few fine sand, black, moist	HA					1
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Drilling Con	tractor:	Driller:	Drilling Me	thod:		Date Drill	ed:	
	eas Engineering	B. Egan	<u> </u>	Hand Auger		<u> </u>	11/23/05	
Logged By:		Logging Method:	Project #:	02064 505		Sheet Nu		
	B. Egan	ASTM-D 2488-00	J	02061-59E			1 of 1	



Traverse City 231,933,4041

BORING:

SB-109

LOCATION:

SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00 Whitewater Township,

PREPARED FOR:

		City 231.933.4041 ng 810.487.0555	Whitewater Township, Grand Trayerse County						
DEPTH		SOI	L DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
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	1	GRADE	Grass						
			few organics, trace silt, brown, moist			///			
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		ORGANIC SILT,	little clay, few fine sand, black, moist				1		_
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Drilling Co	nt	actor:	Driller:	Drilling Me	thod:		Date Drill	ed:	
Inland (Sŧ	as Engineering	B. Egan		Hand Auger	<u> </u>		11/23/05	
Logged By	y:		Logging Method:	Project #:			Sheet Nu		
	ı	3. Egan	ASTM-D 2488-00		02061-59E			1 of 1	



SOIL BORING:

SB-122

LOCATION:

SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00

PREPARED FOR:

Traverse City 231.933.4041 Flushing 810.487.0555 Parcel #13-117-002-00 Williamsburg, Michigan 49 Whitewater Township, Grand Traverse County		igan 49690						
DEPTH	SOIL	DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
_								
	GRADE	Grass						
<u> </u>	SAND, little organ	nics, few silt, few clay brown, moist				1		
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] -	ORGANIC SILT, little clay, little fine sand, black, moist		1					
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<u></u> <u>∇</u> 2								2
		dium, trace silt, trace clay, brown, wet 2.0 Feet below grade						
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	th o other	Dullion	Dellin - A4	thod:		Date Dell	lod:	
Drilling Con Inland S	itiactor: Seas Engineering	Driller: L. Mankowksi	Drilling Me	tnod: Hand Auger		Date Drill	led: 12/2/05	
Logged By:		Logging Method:	Project #:			Sheet Nu	mber:	
L.	Mankowski	ASTM-D 2488-00		02061-59E			1 of 1	



SOIL	BORING
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PREPARED FOR:

Cherry Biossom LLC

Traverse City 231.933.4041 Flushing 810.487.0555 Find INEGRING SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00 Whitewater Township, Grand Traverse County Cherry Biossom LLC 10190 Munro Road Williamsburg, Michigan 49690								
DEPTH	SOIL.	DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE	Grass		1.01				
		ttle clay, little fine sand, black, moist	НА					1
		ium, trace silt, brown, wet O Feet below grade						3
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Orilling Continued States	eas Engineering	Oriller: L. Mankowksi .ogging Method:	Drilling Me	thod: Hand Auger		Date Drill	12/2/05	7
	Mankowski	ASTM-D 2488-00	i Toject #.	02061-59E			1 of 1	

SOIL BORING

SB-124

PREPARED FOR:

LOCATION:

Cherry Biossom LLC

I	у			g,	igan 49690	
DEPTH SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
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ODADE	ł]	
GRADE Grass SAND, few clay, few organics, trace silt, brown, moist						
SAND, 15W day, 16W diganics, trace sit, brown, moist					Ì	
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ORGANIC SILT, little clay, little fine sand, black, mois	it]					
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∇ 2 SAND, fine to medium, few clay, trace silt, brown, wet						2
End of boring = 2.0 Feet below grade						
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Drilling Contractor: Driller:	Drilling Me	thod:		Date Drill	ed:	
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Inland Seas Engineering L. Mankowksi ogged By: Logging Method:	Project #:	Hand Auger		Sheet Nu	12/5/05 mber:	
L. Mankowski ASTM-D 2488-00		02061-59E	j		1 of 1	

PREPARED FOR: SOIL BORING: **SB-125** LOCATION: **Cherry Blossom LLC** SW of Intersection-Angell and Munro Roads 10190 Munro Road Parce! #13-117-002-00 Williamsburg, Michigan 49690 Whitewater Township, Traverse City 231.933.4041 Flushing 810.487.0555 **Grand Traverse County** HAND SAMPLE TYPE & **BLOW** PID READING DEPTH SOIL DESCRIPTION AND COMMENTS PENETROMETER DEPTH **METHOD** INTERVAL COUNT (ppm) (TSF) GRADE SAND, little organics, few clay, trace silt, brown, moist HA ORGANIC SILT, little clay, few fine sand, black, moist SAND, few silt, few clay, brown, moist to wet End of boring = 2.5 Feet below grade 6 7 **Drilling Contractor:** Driller: Drilling Method: Date Drilled:

Hand Auger

02061-59E

Project #:

12/5/05

1 of 1

Sheet Number:

L. Mankowksi

ASTM-D 2488-00

Logging Method:

Logged By:

Inland Seas Engineering

L. Mankowski

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LOCATION:

SW of Intersection-Angell and Munro Roads

PREPARED FOR:

	e City 231.933.4041 ing 810.487.0555	Parcel #13-117-002-00 Whitewater Township, Grand Traverse County			Williamsbu	ırg, Mich	igan 49690	
DEPTH	SOIL	DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
							i	
	GRADE	Grass					; ;	
 		ics, trace silt, trace clay, brown, moist						
1 1	ORGANIC SILT, I	ittlefine sand, few clay, black, moist	HA					1 1
2 <u>▽</u> 2	SAND, few silt, fer	w clay, trace gravel, brown,						2
[<u></u>	End of boring = 2	2.25 Feet below grade						
3								3
4 4								4
 								5
6 								6
								7
Drilling Con	tractor: ⊛as Engin⊛ering	Driller: L. Mankowksi	Drilling Me	thod: Hand Auger		Date Drill	ed: 12/5/05	
Logged By:		Logging Method:	Project #:	Izalia Augel		Sheet Nu	mber:	
L.	Mankowski	ASTM-D 2488-00		02061-59E			1 of 1	



MONITOR WELL:

TMW-1

LOCATION:

SW of Intersection-Angell and Munro Roads

PREPARED FOR:

Cherry Blossom LLC

Traverse (City 231-933-4041 g 810-487-0555	Parcel Whitew	n-Angell and Munr #13-117-002-00 ater Township, Fraverse County	o Roads		Wil	Cherry Blossor 10190 Munro I liamsburg, Michi	Road	
DEPTH	SOIL	DESCRIPTION AND COMME	ENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVA	BLOW COUNT	WELL DIAGRAM	DEPTH
2 <u>\brace</u> 2	ORGANIC SILT, SAND, fine to me	Grass few organics, trace silt, little clay, little fine sand edium, few clay, trace s gray, moist 4.0 Feet below grade	d, black, moist		НА				1
Drilling Contra	ctor:	Driller:		Drilling Metho	l d:	L	Date Drilled:	i_il	
	as Engineering	T. Gates			and Auger			12/5/05	
Logged By:		Logging Method:	Development Meth				Project #:		
	. Gates	ASTM-D 2488-00		Peristaltic Pu				02061-59E	
Casing Type:		Screen Type and Length:	Į.	1			Sheet Number:		
L1	I" PVC	1" PVC 10 Slot / 5'	NM	3.7 Fee	t Above Gr	ade		1 of 1	



MONITOR WELL:

TMW-2

LOCATION:

SW of Intersection-Angell and Munro Roads

PREPARED FOR:

Cherry Blossom LLC

	City 231-933-4041 g 810-487-0555	Whitew	#13-117-002-00 ater Township, Fraverse County			Wil	10190 Munro I	Road	
DEPTH	son	DESCRIPTION AND COMME	ENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	BLOW COUNT	WELL DIAGRAM	DEPTH
11	GRADE SAND, few clay, ORGANIC SILT, SAND, fine, trace	Grass few organics, trace silt, little clay, few fine sand e silt, trace clay, brown, edium, trace silt, reddish	brown, moist d, black, moist wet				BLOW COUNT		1 2 3 5 6 7
Drilling Contra		Driller:		Drilling Metho			Date Drilled:		
	as Engineering	T. Gates			and Auger		Desired 4	12/5/05	
Logged By:	Cotoo	Logging Method:	Development Meth				Project #:	00064 505	
	. Gates	ASTM-D 2488-00	Ground Flourier	Peristaltic Pu				02061-59E	
Casing Type:	u pv.	Screen Type and Length:	Ground Elevation:	· ·		حلاء	Sheet Number:	4 -6 6	
	I" PVC	1" PVC 10 Slot / 5'	NM	3.6 Fee	t Above Gr	ade	<u> </u>	1 of 1	

GRADE Grass SAND, few cray, few organics, trace silt, brown, moist ORGANIC SILT, little fine sand, little to few clay, black, moist SAND, fine to medium, few clay, trace silt, brown, wet CLAY, trace silt, gray End of boring = 4.0 Feet below grade - REFUSAL Point would not be driven more deeply 5 Orilling Controctor: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering LCM Port Power Salt Grass Driller: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering LCM Drilling Method: Infland Auger Driller: Infland Auger Driller: Infland Saas Engineering Driller: Infland Saas Engineering Driller: Infland Saas Engineering										
SW of Intersection-Angell and Munno Roads Parcel #13-117-02-00 Travenie Chy 231-833-4041 Plusing 810-467-0555 DEPTH SOIL DESCRIPTION AND COMMENTS PECOVERY METHOD NITERYAL BLOW COUNT DIAGRAM DEPTH SOIL DESCRIPTION AND COMMENTS PECOVERY METHOD NITERYAL BLOW COUNT DIAGRAM DEPTH SOIL DESCRIPTION AND COMMENTS PECOVERY METHOD NITERYAL BLOW COUNT DIAGRAM DEPTH SOIL DESCRIPTION AND COMMENTS PECOVERY METHOD NITERYAL BLOW COUNT DIAGRAM DEPTH SOIL DESCRIPTION AND COMMENTS PECOVERY METHOD NITERYAL BLOW COUNT DIAGRAM DEPTH SOIL DESCRIPTION AND COMMENTS PECOVERY METHOD NITERYAL BLOW COUNT DIAGRAM DEPTH SOIL DIAGRAM DEPTH SOIL DIAGRAM DEPTH SOIL DESCRIPTION AND COMMENTS PECOVERY METHOD NITERYAL BLOW COUNT DIAGRAM DEPTH SOIL DIAGRAM DEPTH S		1	MONITOR WELL:	TMW-3		PREPARE	D FOR:			
GRADE Grass SAND, few clay, few organics, trace silt, brown, moist ORGANIC SILT, little fine sand, little to few clay, black, moist A CLAY, trace silt, gray End of boring = 4.0 Feet below grade - REFUSAL Point would not be driven more deeply Drilling Contructor: Infland Spase Engineering Driller: Infland Spase En	Traverse (City 231-933-4041	SW of Intersection Parcel Whitew	#13-117-002-00 ater Township,	o Roads		Wil	10190 M unro	Road	
SAND, few clay, few organics, trace slit, brown, moist ORGANIC SILT, little fine sand, little to few clay, black, moist SAND, fine to medium, few clay, trace slit, brown, wet CLAY, trace slit, gray End of boring = 4.0 Feet below grade - REFUSAL Point would not be driven more deeply 5 6 6 7 Drilling Contractor: Inland Svas Engineering Driller: LCM Drilling Method: Hand Auger Date Drilled: Hand Auger Date Dri	DEPTH	SOIL	DESCRIPTION AND COMME	ENTS				BLOW COUNT		DEPTH
	1 1 2 <u>\subseteq \subseteq \limits_{\text{-}} \limits_{\t</u>	SAND, few clay, i moist ORGANIC SILT, i black, moist SAND, fine to me	few organics, trace silt, little fine sand, little to f dium, few clay, trace si	few clay, ilt, brown, wet		на				1 2 3
Inland Seas Engineering LCM Hand Auger 12/16/2006	6 6 7		Dall							5 6 7
·····································		1			í				12/16/2006	
Logged Σ).				Development Meth		and Auger			12/16/2006	<u>-</u> -
LCM ASTM-D 2488-00 Peristaltic Pump 02061-59E		1		1		ımn		}	02061-59E	

1" PVC 10 Slot / 5'

Casing Type:

1" PVC

Screen Type and Length: Ground Elevation: Top of Casing Elevation:

NM

Sheet Number:

1 of 1

NM

WESTON TRANSMITTAL FORM

Job No.:

12634.001.002.0574

E ARE		arfield Avenue, #2 se City, MI 49686 G YOU:		Re: WRS: File No: 2.1	Site, Williamsbu	urg, MI
X	Atta	ched		Under Separate Cove	r	
	———	ts cifications p Drawings		Plans Copy of Letter Reports		Samples Change Order
Сор	oies	Date	No.		Descript	tion
		03/06/06		Inland Waters Le	etter Report	dated 3/06/06
	For App As Req			For Your Use Returned After Loan to	 o Us	Copies for Approval Copies for Distribution
	For Rev	view and Commer		Other (explain)	_	Corrected Prints Date:
	(S :	view and Commer	Signed		f Michigan, Inc.	Date:
CPY TO	(S: D:	NG check below,	Signed	Weston Solution o		Date:
OPY TO	CS: ETURNIN Approve	NG check below,	Signed	Weston Solution o	Сор	Date:
OPY TO	CS: ETURNIN Approve	NG check below,	Signed	Weston Solution o	Cor	Date:

Date:

03/08/06



TO:

U.S. EPA Region 5